

Enrolment Course Structure

Course Code – SI5

Course Name – Bachelor of Science

First Year	Unit Code	Unit Name	Unit Rules
Semester 1			
	SCBIO1001	Principles of Biology	
	SCCHM1001	Chemistry 1	
	SCCOR1200	Scientific Communication	
		Major	
Semester 2			
	COOPS1001	Professional Identity (Science)	
	SCCOR1300	Scientific Practice	
		Minor	
		Major	
Second Year	Unit Code	Unit Name	Unit Rules
Semester 1			
		Major	
		Minor	
		Elective	
		Elective	
Semester 2			
	COOPS2011	Co-op placement 1	
		Major	
		Minor	
		Elective	

Third Year	Unit Code	Unit Name	Unit Rules
Semester 1			
	COOPS2012	Co-op placement 2	
		Major	
		Major	
Semester 2			
		Major	
		Major	
		Minor / Elective	
		Elective	

Bachelor of Science Major and Minor Sequences

BIOCHEMISTRY

Major

SCBCH2001 Biochemistry
 SCBCH2002 Nutrition and Metabolism
 SCBCH3010 Advanced Bioanalytical Techniques
 SCBIO1001 Principles of Biology
 SCCHM1002 Chemistry 2
 SCCHM3001 Medicinal Chemistry
 SCMOL2001 Biotechnology Laboratory Techniques
 SCMOL3001 Molecular Cell Biology

Minor

SCBIO1001 Principles of Biology
 SCCHM1002 Chemistry 2

Two of:

- SCBCH2001 Biochemistry
- SCBCH2002 Nutrition and Metabolism
- SCMOL2001 Biotechnology Laboratory Techniques

BIOLOGICAL SCIENCE

Major

SCBIO1001 Principles of Biology
 SCCHM1002 Chemistry 2

Three (pairs) of:

- SCMED2010 Pathophysiology 1 **and** SCMED3034 Histopathology and Haematology

- SCMOL2010 Mammalian Genetics **and** SCMOL3001 Molecular Cell Biology
- SCMIC2001 General Microbiology **and** SCMIC3003 Clinical Microbiology or SCMIC3002 Food Microbiology
- SCBCH2002 Nutrition and Metabolism **and** SCMED3010 Pharmacology and Toxicology
- SCVET2001 Animal Management and Disease **and** SCVET3001 Case Studies in Animal Management
- SCENV2100 Australian Fauna **and** SCENV2101 Australian Flora

Minor

SCBIO1001 Principles of Biology

SCCHM1002 Chemistry 2

One (pair) of:

- SCMED2010 Pathophysiology 1 **and** SCMED3034 Histopathology and Haematology
- SCMOL2010 Mammalian Genetics **and** SCMOL3001 Molecular Cell Biology
- SCMIC2001 General Microbiology **and** SCMIC3003 Clinical Microbiology
- SCBCH2002 Nutrition and Metabolism **and** SCMED3010 Pharmacology and Toxicology
- SCVET2001 Animal Management and Disease **and** SCVET3001 Case Studies in Animal Management
- SCENV2100 Australian Fauna **and** SCENV2101 Australian Flora

BREWING

Double Major

SCBCH2001 Biochemistry

SCBCH2002 Nutrition and Metabolism

SCBCH3010 Advanced Bioanalytical Techniques

SCBRW5081 Brewing Raw Materials

SCBRW5082 The Brewing Process

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM3003 Food Chemistry

SCFST2023 Food Processing Systems 1

SCMIC2001 General Microbiology

SCMIC3002 Food Microbiology

SCMOL2001 Biotechnology Laboratory Techniques

Minor

SCBRW5081 Brewing Raw Materials

SCBRW5082 The Brewing Process

SCCHM1002 Chemistry 2

SCFST2023 Food Processing systems 1 **or** SCMIC2001 General Microbiology

CHEMISTRY AND ANALYTICAL SCIENCE

Double Major

SCBCH2001 Biochemistry

SCBCH3010 Advanced Bioanalytical Techniques

SCBIO1001 Principles of Biology

SCCHM1001 Chemistry 1

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM2002 Environmental Chemistry

SCCHM3001 Medicinal Chemistry
 SCCHM3003 Food Chemistry
 SCCHM3004 Organic Synthesis for Drug Design
 SCCOR3001 Research Project
 SCMOL2001 Biotechnology Laboratory Techniques
 STATS1000 Statistical Methods
 STATS2100 Experimental Design and Analysis

Two of:

- SCENV3400 Wetlands and Water Resources
- SCENV3912 Environmental Assessment
- SCMED3010 Pharmacology and Toxicology
- STATS2101 Statistics for Prediction
- SCMIC3002 Food Microbiology

CHEMISTRY

Major

SCBCH2001 Biochemistry
 SCCHM1001 Chemistry 1
 SCCHM1002 Chemistry 2
 SCCHM2001 Analytical Techniques
 SCCHM2002 Environmental Chemistry

Three of:

- SCBCH3010 Advanced Bioanalytical Techniques
- SCCHM3001 Medicinal Chemistry
- SCCHM3003 Food Chemistry
- SCCHM3004 Organic Synthesis for Drug Design

Minor

SCCHM1001 Chemistry 1
 SCCHM1002 Chemistry 2

Two of:

- SCBCH2001 Biochemistry
- SCCHM2001 Analytical Techniques
- SCCHM2002 Environmental Chemistry

ECOLOGY

Major

SCENV1001 Environmental Studies
 SCENV1002 Biodiversity Conservation
 SCENV2100 Australian Fauna **or** SCENV2101 Australian Flora
 SCENV2200 Population and Community Ecology
 SCENV2500 FIELD-BASED INVESTIGATION
 SCENV3110 Fire Ecology: Burning Issues for Science and Management
 SCENV3204 Arid Zone: Ecology, Management and Challenges
 SCENV3802 Wildlife and Ecosystem Conservation

Minor

SCENV1001 Environmental Studies

SCENV1002 Biodiversity Conservation

SCENV2200 Population and Community Ecology

SCENV2100 Australian Fauna **or** SCENV2101 Australian Flora

ENVIRONMENTAL RESTORATION

Major

SCCHM2002 Environmental Chemistry **or** SCENV2100 Australian Fauna

SCENV2101 Australian Flora

SCENV1001 Environmental Studies

SCENV2804 Invasive Species: Ecology, Management and Challenges

SCENV3120 Landscape Restoration and Mine Site Rehabilitation

SCENV3400 Wetlands and Water Resources **or** SCENV3500 Climate and Environmental Issues in a Changing World

SCENV3912 Environmental Assessment

SCSUS1500 Sustainable Earth

Minor

SCENV1001 Environmental Studies

SCENV2804 Invasive Species: Ecology, Management and Challenges

SCENV3120 Landscape Restoration and Mine Site Rehabilitation

SCSUS1500 Sustainable Earth

FOOD SCIENCE

Major

SCBCH1001 Introduction to Nutrition

SCBCH2002 Nutrition and Metabolism

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCCHM3003 Food Chemistry

SCFST2023 Food Processing Systems 1

SCFST3026 Product and Process Development

SCMIC3002 Food Microbiology

Minor

SCBCH1001 Introduction to Nutrition

SCCHM1002 Chemistry 2

SCFST2023 Food Processing Systems 1

SCFST3026 Product and Process Development

GEOSCIENCE

Double major in Geoscience

SCCHM1001 Chemistry 1

SCCHM2002 Environmental Chemistry

SCENV2600 Geographic Information Systems

SCENV3120 Landscape Restoration and Mine Site Rehabilitation

SCENV3500 Climate and Environmental Issues in a Changing World

SCGEO1103 Planet Earth

SCGEO1104 Landscape Evolution
 SCGEO2103 Structural Geology
 SCGEO2106 Hydrology
 SCGEO2107 Fieldwork Principles and Practice
 SCGEO2112 Sedimentology and Stratigraphy
 SCGEO3102 Petrology
 SCGEO3104 Fieldwork
 SCGEO3115 Geochemical and Geophysical Techniques
 SCGEO3116 Economic Geology
 SCSUS1500 Sustainable Earth

Major

SCGEO1103 Planet Earth
 SCGEO1104 Landscape Evolution
 SCGEO2103 Structural Geology
 SCGEO2107 Fieldwork Principles and Practice
 SCGEO2112 Sedimentology and Stratigraphy
 SCGEO3102 Petrology
 SCGEO3115 Geochemical and Geophysical Techniques
 SCGEO3116 Economic Geology

Minor

SCGEO1103 Planet Earth
 SCGEO1104 Landscape Evolution
 SCGEO2103 Structural Geology
 SCGEO2112 Sedimentology and Stratigraphy

INFORMATION TECHNOLOGY

Minor

ITECH1500 Digital Literacy
 ITECH1503 Data and Information Systems
 ITECH2003 Web Design
 ITECH2004 Data Modelling

LABORATORY BIOSCIENCE

Major

SCBCH3010 Advanced Bioanalytical Techniques
 SCBIO1001 Principles of Biology
 SCCHM1002 Chemistry 2
 SCCHM2001 Analytical Techniques
 SCCHM3001 Medicinal Chemistry
 SCMIC2001 General Microbiology
 SCMIC3003 Clinical Microbiology
 SCMOL2001 Biotechnology Laboratory Techniques
 SCBCH3010 Advanced Bioanalytical Techniques

Minor

SCBIO1001 Principles of Biology

SCCHM1002 Chemistry 2

SCCHM2001 Analytical Techniques

SCMOL2001 Biotechnology Laboratory Techniques

MATHEMATICS

Minor (Calculus stream) *required for VIT registration for VCE teaching

MATHS1100 Applied Mathematics 1

MATHS2100 Applied Mathematics 2

MATHS3100 Applied Mathematics 3

STATS1000 Statistical Methods

Minor (Non-calculus stream)

MATHS1100 Applied Mathematics 1

STATS1000 Statistical Methods

Two of:

- MATHS2003 Profit, Loss and Gambling (Intermediate Level)
- MATHS2009 Space, Shape and Design (Intermediate Level)
- MATHS2012 Graphs, Digraphs and Networks

MEDICAL SCIENCE

Major

SCBCH2001 Biochemistry

SCBIO1020 Systems Biology

SCCHM1002 Chemistry 2

SCMED2010 Pathophysiology 1

SCMED3010 Pharmacology and Toxicology

SCMED3034 Histopathology and Haematology

SCMOL2010 Mammalian Genetics

SCMOL3020 Immunology

Minor

SCBCH2001 Biochemistry **or** SCMED2010 Pathophysiology 1

SCBIO1020 Systems Biology

SCCHM1002 Chemistry 2

SCMOL2010 Mammalian Genetics

MICROBIOLOGY

Major

SCBCH3010 Advanced Bioanalytical Techniques

SCBIO1001 Principles of Biology

SCCHM1002 Chemistry 2

SCMIC2001 General Microbiology

SCMIC3002 Food Microbiology

SCMIC3003 Clinical Microbiology

SCMOL2001 Biotechnology Laboratory Techniques

SCMOL3020 Immunology

Minor

SCBIO1001 Principles of Biology
 SCCHM1001 Chemistry 1
 SCMIC2001 General Microbiology
 SCMOL2001 Biotechnology Laboratory Techniques

STATISTICS

Minor

MATHS1100 Applied Mathematics 1
 STATS1000 Statistical Methods
 STATS2100 Experimental Design and Analysis
 STATS2101 Statistics for Prediction

VETERINARY BIOSCIENCE

Double Major

* courses marked with an asterisk are compulsory for students hoping to complete a Veterinary Science/Veterinary Medicine graduate qualification

SCBCH1001 Introduction to Nutrition **or** SCBCH2001 Biochemistry*
 SCBCH2002 Nutrition and Metabolism*
 SCBIO1020 Systems Biology
 SCCHM1002 Chemistry 2* **or** elective
 SCENV1002 Biodiversity Conservation
 SCMED2010 Pathophysiology 1
 SCMED2011 Pathophysiology 2
 SCMED3010 Pharmacology and Toxicology
 SCMED3034 Histopathology and Haematology
 SCMIC2001 General Microbiology
 SCMIC3003 Clinical Microbiology* **or** SCCOR3001 Research Project
 SCMOL2001 Biotechnology Laboratory Techniques
 SCMOL3020 Immunology
 SCVET2001 Animal Management and Disease
 SCVET3001 Case Studies in Animal Management

WILDLIFE AND ECOSYSTEM CONSERVATION

Double Major

SCENV1001 Environmental Studies
 SCENV1002 Biodiversity Conservation
 SCENV2100 Australian Fauna
 SCENV2101 Australian Flora
 SCENV2200 Population and Community Ecology
 SCENV2500 FIELD-BASED INVESTIGATION
 SCENV2600 Geographic Information Systems
 SCENV2804 Invasive Species: Ecology, Management and Challenges
 SCENV3500 Climate and Environmental Issues in a Changing World
 SCENV3802 Wildlife and Ecosystem Conservation
 SCENV3912 Environmental Assessment
 SCSUS1500 Sustainable Earth

Two of:

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- SCCHM2002 Environmental Chemistry
 - SCCOR3001 Research Project
 - SCENV3110 Fire Ecology: Burning Issues for Science and Management
 - SCENV3120 Landscape Restoration and Mine Site Rehabilitation
 - SCENV3204 Arid Zone: Ecology, Management and Challenges
 - SCENV3400 Wetlands and Water Resources
 - SCEXC2500 International Exchange
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Course Rules

- The Bachelor of Science course requires three years of full-time study or equivalent part-time study.
- Students must complete all core units, plus either:
 - one major sequence (8 x 15cp units) and one minor sequence (4 x 15 cp units), or
 - a double major sequences (14 x 15cp units) available in Brewing and Food Science, Chemistry and Analytical Science, Veterinary Bioscience, Wildlife and Ecosystem Conservation
- A maximum of ten 1000-level units and a minimum of four 3000-level units are required
- The Co-op Placement unit can be completed as 2 x 30cp units at any time in the second and third year of study

Additional Information

This course structure applies to students commencing from 2025. Students who commenced prior to 2025 should refer to the continuing enrolments page.

TEQSA have advised that, in accordance with B1.1.3 of [Higher Education Standards Framework \(Threshold Standards\) 2021](#) all Higher Education Providers are required to show their TEQSA Provider number and Provider Category on all relevant public material. ITS have ensured that our website and email signature templates have been amended to ensure compliance and have provided a knowledge article to assist you to update your signatures. Marketing are working to update the brand library and all social media accounts.

Glossary

Semester: designated teaching period.

PR: Pre-requisite, a unit/s that must be completed prior to undertaking another unit.

CO: Co-requisite, a unit/s that must be completed simultaneously, or prior to, undertaking another unit.

EX: Exclusion, a unit/s that may not be taken.